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[Taunton, Mass.]

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3 p. l., 5-70 p., 3 l. front., illus. (incl. plans) 23½cm.

Library of Congress GV367.N5C6 13-19524
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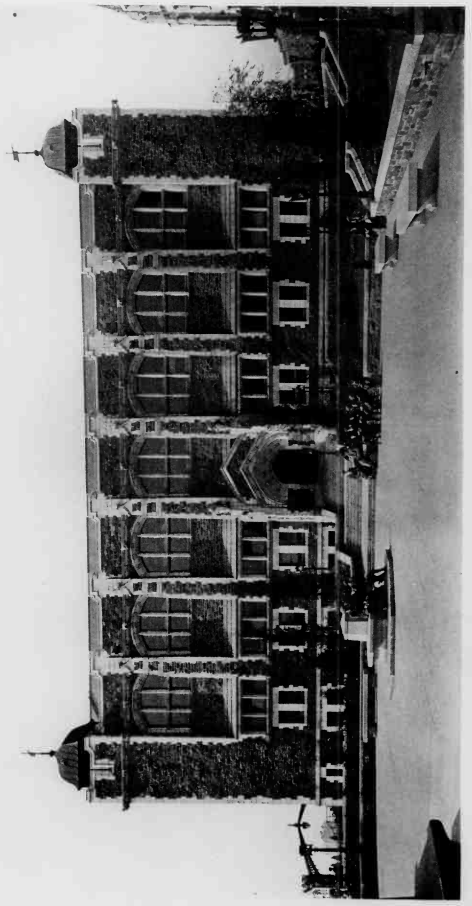
DEPARTMENT *of* HYGIENE

OF THE

COLLEGE OF THE CITY OF NEW YORK



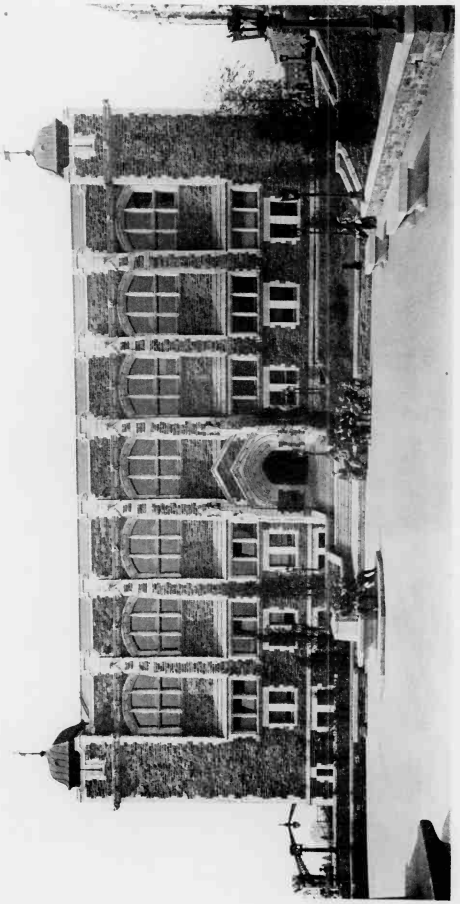
THE HYGIENE BUILDING

DEPARTMENT OF HYGIENE

OF THE

College of the City of New York

ILLUSTRATED DESCRIPTION
OF ITS BUILDING EQUIPMENT AND
PLAN OF WORK



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ILLUSTRATED DESCRIPTION
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FOREWORD

THIS little book describes a Department of Hygiene which has been built, equipped and manned under the direction of the chosen agents of a Great City for the purpose of teaching the youth of that city the fundamental laws of human health.

These chosen agents, The Trustees, President, and Faculty of the College of the City of New York, regard the instruction of these future citizens in the theory and practice of health habits as of the most essential importance to the successful acquisition and conservation of personal and community health, the greatest resource of a city or nation.

It is hoped that this outline may be suggestive to other individuals and communities interested in the same serious important human problems.

THOMAS A. STOREY.

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THE COLLEGE OF THE CITY OF NEW YORK
MAIN BUILDING

DEPARTMENT OF HYGIENE.

BUILDING AND EQUIPMENT.

THE BUILDING which contains this Department is a stone and terra cotta structure conforming in type with the Gothic style of architecture which characterizes all the buildings occupied by The College of the City of New York. Externally this building presents a pleasing ensemble of straight lines and right angles, with here and there a decorated arch. It is generously supplied with windows. Symbolic, grotesque, dwarf figures are placed symmetrically here and there in the terra cotta lines and sills. These grotesques are bending the bow, lifting weights, throwing the discus, and performing other feats of strength and skill.*

The building is one hundred and forty-nine feet long and seventy-seven feet wide. It contains a basement and two stories. The first story is divided by a mezzanine floor, and the second story contains a gallery.

The basement, which is on a level with the street at one end and on a part of one side, is well supplied with prism glass windows. These windows face the open so that the basement receives an abundance of direct and indirect sunlight, a fact which makes it a most desirable place for the location of a swimming pool. Visitors are always impressed with the flood of warm sunshine that has such free access to this great room, illuminating all its parts and bringing into view even the white tiled bricks that lie deep in the transparent water. The pool is one hundred feet long and twenty-nine feet wide. It is five feet deep at one end and eight feet deep at the other. The tank is faced and floored throughout with white glass tile bricks so carefully laid that the waterproof cement between the bricks forms perfectly parallel lines, which give a pleasing effect of order and symmetry when seen through the water or reflected from its surface.

*It is most interesting to note that each of the many hundred grotesques that decorate the stone walls of the City College is symbolic of some phase of work done within those walls. I am indebted to Dr. Ivan Sickels for access to his original list of themes which these grotesques symbolize.

A detailed description of these decorations was published in the City College Quaterly some years ago.

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MAIN ENTRANCE

A specially devised overflow carries away the surface water. This overflow is of bronze and extends in a long trough beneath the overhanging slate coping on the sides of the tank so that there is no danger of injury from falling against it on entering or leaving the pool. This trough is so arranged that every wave on the surface of the pool washes its crest into the overflow. The trough empties into the tank drain. When the pool is in use this process of surface removal goes on continually. This arrangement has a two-fold value. It diminishes the interference with the waves of the swimmer in competition and it creates a surface flow which does much to keep the water in the tank clean.

The following measures are taken in order to keep the water pure. Each bather is required to be clean before he is permitted to use the pool. A shower bath must precede a swim. This rule is carefully enforced. All classes taking work in the Department are instructed several times each year concerning the obligation of each student to do his share to maintain the sanitation of his surroundings and particularly the sanitation of the pool. Heavy emphasis is laid upon the fact that the hygiene of the swimming pool is a problem in community hygiene involving community co-operation and community responsibility with reference to the group of students who use the swimming pool. In addition, the pool is supplied day and night with a continuous stream of fresh, tempered, filtered water and is emptied and scrubbed and

VISITORS' GALLERY IN SWIMMING POOL

thoroughly cleaned once a week. The necessity for these precautions becomes evident when one learns that in certain seasons of the year the weekly use of the swimming pool averages between three and four thousand baths.

Every day samples of water are taken from the tank in the morning and in the evening. These samples are taken from the surface and from the bottom of the tank and are subjected to bacteriological analysis. Bacterial counts are made and regular tests for the bacillus coli are carried out on each sample of water taken. Every student is inspected before he goes into the swimming pool and no one with any evidence of local or general infection or a parasitic disease of any sort is permitted to enter the tank. Bathing suits of any sort are prohibited. Every student is examined medically at regular intervals every half year. This examination occasionally offers a basis for keeping a young man out of the pool until he recovers from a cold in the head, infected eyelids or an open discharging wound. In these various ways a consistent effort is made to keep the water in the tank clean.

The pool is surrounded by a red tile waterproof floor about eight feet wide. This floor serves as a runway for the swimmers. Six large, square columns rest on the runway on each side at the edge of the tank. These columns are surfaced with white glass tile bricks and support the ceiling of the swimming pool room.

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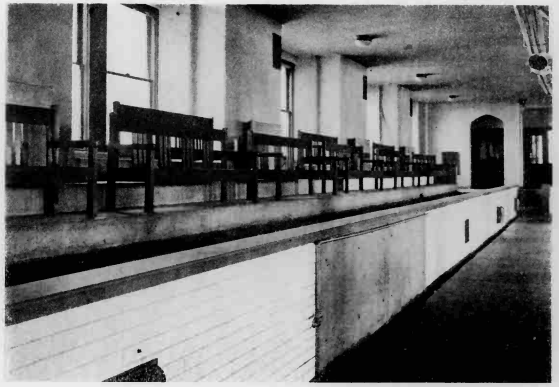

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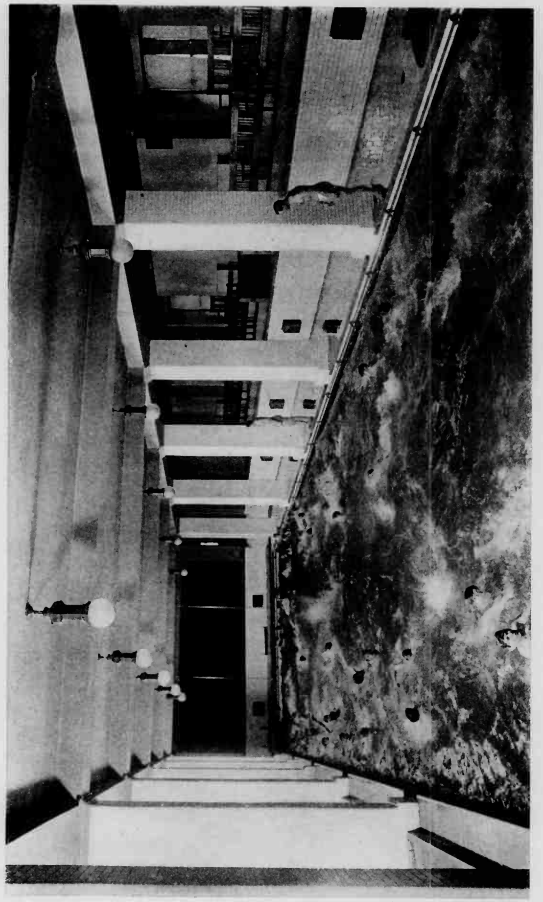
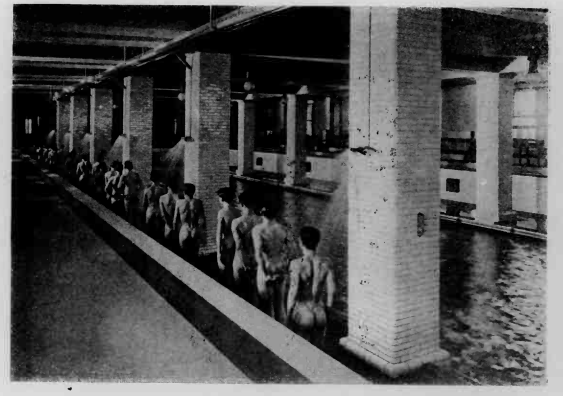


CLASS WORK IN THE SWIMMING POOL



AISLE OF SHOWERS IN SWIMMING POOL ROOM

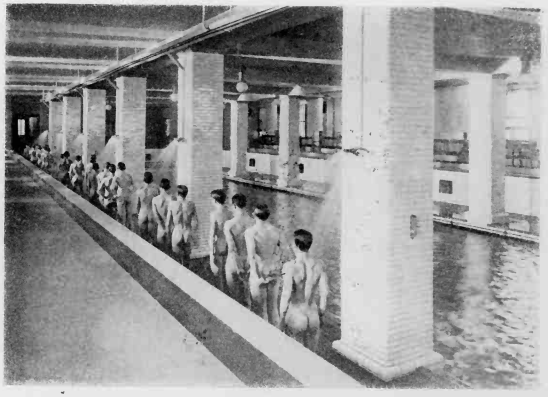
The six columns on the south side of the tank support clusters of shower rosettes which, when in use, make the south runway a continuous shower through a hundred feet of its length.

Surrounding this runway and about four feet higher, there is at each end of the swimming pool and on both sides of the room a gallery for spectators. The side galleries have raised seats.

This great room, with its clear pool, white tiled bricks, bright, natural light and fine ventilation, its straight lines, balance and symmetry, and its easy and attractive utility, must and does have a powerful influence upon the student. Here he receives healthful exercise and here he learns to swim, possibly for the preservation of his own life or that of another human being; here he meets scores— it may be hundreds— of his fellow students on a basis of social intimacy and social equality which is elsewhere attained only in the exercising hall of the gymnasium. And it is all clean. His surroundings are clean. His object in being there is clean. His social intercourse is clean. The habits he cultivates are clean habits.

The floor above the swimming pool is the second or street floor of the buildings. The main entrance leads by a few stone steps from the terrace of the plaza to this floor. Here are located three fine hand-ball courts, a large student locker-room, two student shower rooms, a faculty locker and shower room, a small, special exercising room and a fair sized room for athletic supervision.

CLASS WORK IN THE SWIMMING POOL



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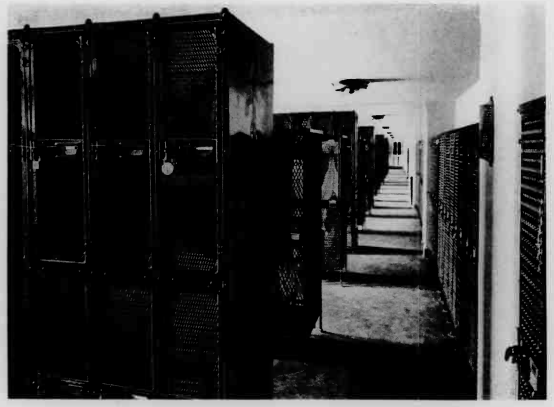
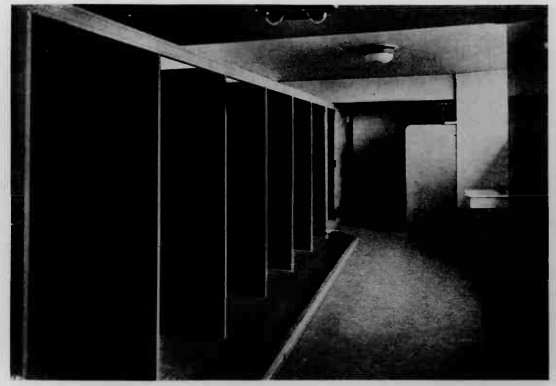


STUDENT LOCKER ROOM

The hand-ball courts are about thirty feet square. They are well lighted and well used. The problem of ventilation is being solved by the use of electrical fans and special plenum ducts which bring in air directly from outside the building. Hand-ball has become a very popular game with the students in the City College, so that these courts are always busy and there is usually a waiting list. The hours between five and six every day are set aside for faculty use and two or three faculty games are going on there nearly every night.

The student locker room on this floor is provided with steel lockers and combination locks. There is another room like it on the floor above. In these two rooms there are at present fourteen hundred lockers. Here the demand for the lockers is greater than the supply.

The small, special exercising room on this floor serves several purposes. Wrestling and boxing is taught here to students who are voluntarily interested in such activities. The punching bags in this room are in fairly general use. But the most important function of this room is in connection with those students who are organically unfitted for the regular required course in physical exercise given in this Department. There are, on the average, fifteen or twenty students who are forced to take this special work because of bad hearts, paralyzed muscles or other abnormalities.



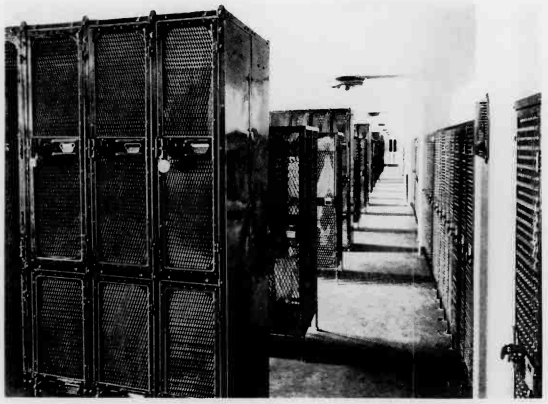
SMALL SHOWER AND TOILET ROOM FOR STUDENT USE

The Faculty Athletic Committee Room is bright, attractive and commodious. It contains desks for departmental instructors, student team managers, and officials of the Athletic Association; and files for Association records. Seven years ago the Athletic Association was over seven hundred dollars in debt. It had been supported by faculty and alumni subscriptions. Two years later, without any such subscriptions, the Association had paid all its bills and all of the seven hundred dollar debt which it inherited, and ever since has carried a cash balance large enough to meet the initial expenses of each new athletic season. The college supervision of athletics aims to secure clean, sportsmanly conduct, a wise and honorable business policy and a general student participation in healthful athletic competition.

The instructors' locker and shower room is furnished with seventy odd lockers. It is well lighted, well ventilated and adequately furnished. It is open to the use of officers of instruction at all times during the day.

The third or mezzanine floor contains student locker and shower rooms like those on the floor below. This floor contains also a departmental laboratory, record room, examining room, departmental office, director's office, director's dressing room and the departmental storeroom.

The laboratory was originally constructed to serve as a butler's pantry. It has a tiled floor, a white glass tiled brick wains-



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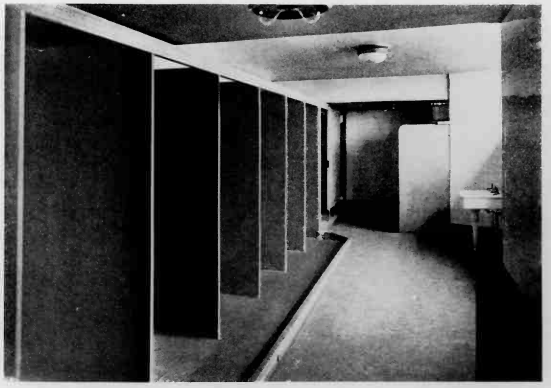

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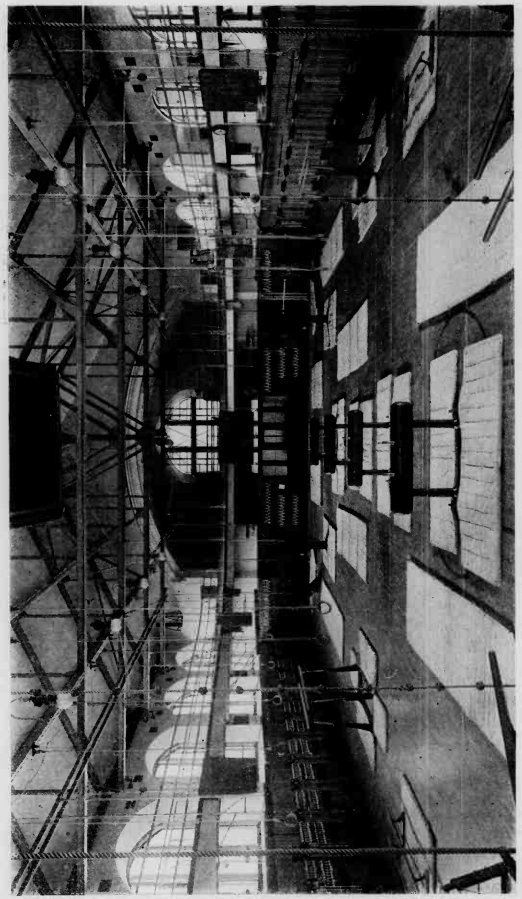


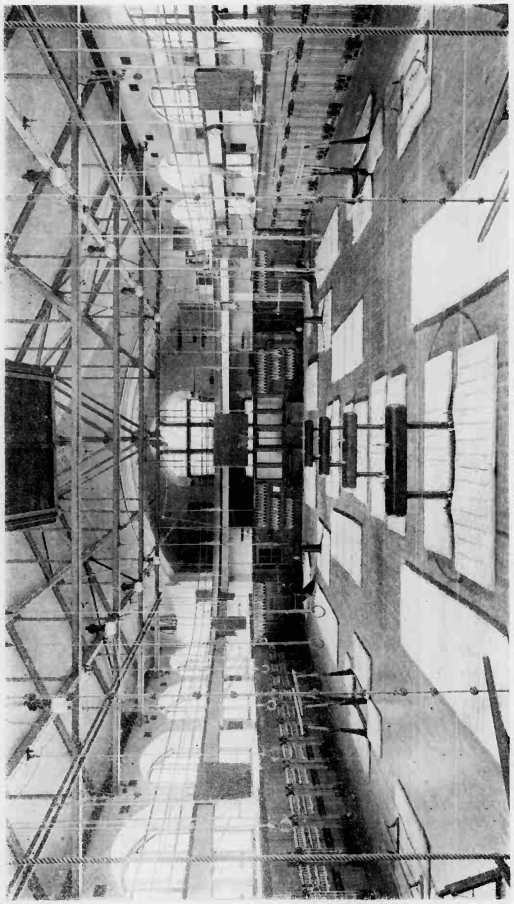
LAYOUT OF APPARATUS IN MAIN EXERCISING HALL

RECORD ROOM (CONTAINS OVER 60,000 RECORDS)

coting and white enameled walls and ceiling. This construction lends itself very effectively to laboratory use. The equipment of this room is made up of thermostats, dry and steam sterilizers, a fine microscope and such other supplies as are needed for bacteriological and chemical analyses. This equipment which has been lately installed, was selected for the following uses:

1. For the regular systematic bacteriological analysis of the water in the swimming pool.
2. For the examination of the excretions of all students who have had typhoid fever, in order to discover if they are carriers of the bacilli which cause that disease.
3. For the bacteriological examination of the throats of all students presenting evidences of local inflammation.
4. For the bacteriological examination of sputum.
5. For urinary analyses.
6. For blood examination, and
7. For such other bacteriological and chemical analyses as may be of practical value to this Department in its plans for the effective health supervision of the general student body.

The record room is amply equipped with filing accommodations for records of medical and hygienic examinations of students in the academic and collegiate department. These files have a space capacity for the records of ten thousand students receiving



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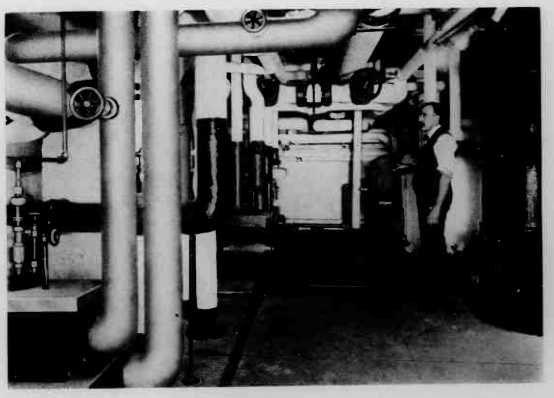

PUMP ROOM

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The examining room is one of the most important rooms in the building. It was originally a small shower and toilet room, measuring about twenty by eighteen feet. It has a tiled floor, glass tiled walls and a painted plaster ceiling. It is supplied with white enameled steel furnishings of the hospital examination room type, and, in connection with the laboratory, contains all the equipment necessary for the complete, practical, general medical examination of the students. The examinations that are made in this room are essential to our plan for individual instruction in personal hygiene. The seventy thousand examinations that have taken place here during the last five years have been made for the purpose of giving each individual student concerned an intelligent knowledge of his own particular health problems.

The departmental office is equipped for such stenographic and filing demands as inevitably belong to a department of such size and diverse activities. It contains shelf room for several hundred reference books; files for records of departmental correspondence; and a desk and typewriter for the departmental stenographer. The director's private office immediately adjoins this departmental office.

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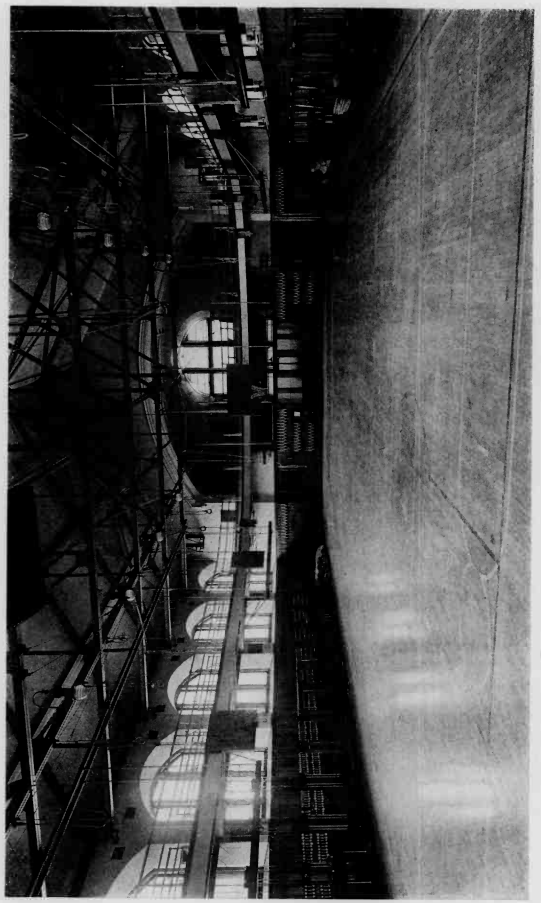
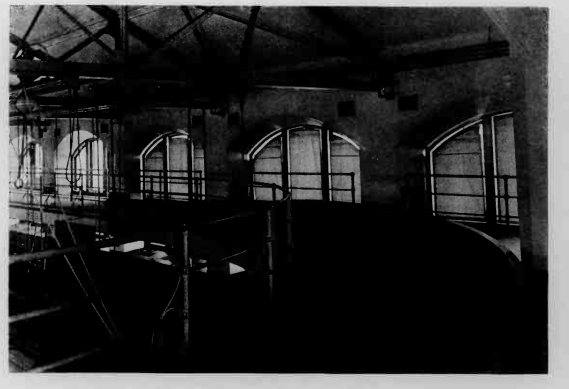


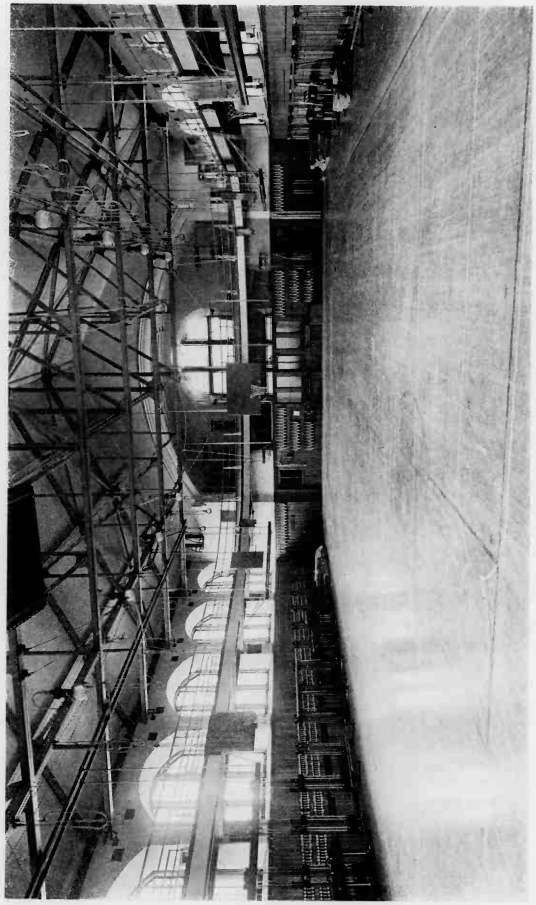
EXERCISING HALL CLEARED FOR MASS DRILL



SECTION OF RUNNING TRACK

The exercising hall, or fourth floor, like the basement is in reality one great room. A half partition separates the hall from the gymnasium office. The gallery contains a seventeen lap running track. The whole room is very well ventilated and very well illuminated. It is cheerful and attractive. The exercising hall is one hundred and sixteen feet long and sixty-seven feet wide. It will accomodate two hundred and twenty-five men at a time for mass drill. It is supplied with nearly all the apparatus ordinarily found in a gymnasium. The total number of students in attendance in the required courses in this room has varied from fifteen hundred to a thousand a year.

These various rooms, with their furnishings and supplies, are the laboratories with which this Department of Hygiene is equipped for the purpose of turning out intelligently healthy, vigorous, physically efficient men of sound and aggressive moral character. In furtherance of this purpose the departmental curriculum includes several related phases of work which are known to influence health and character. This correlation of influences is concisely presented in the departmental announcement contained in the College register for the coming year. For which see below.



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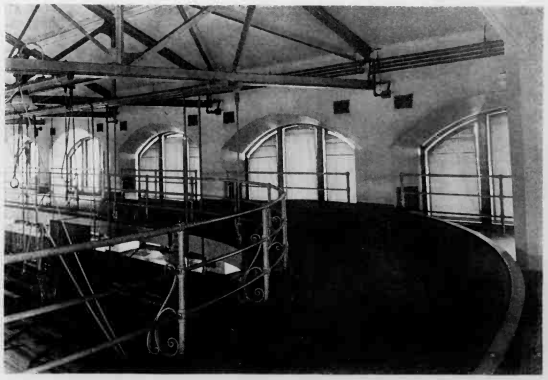

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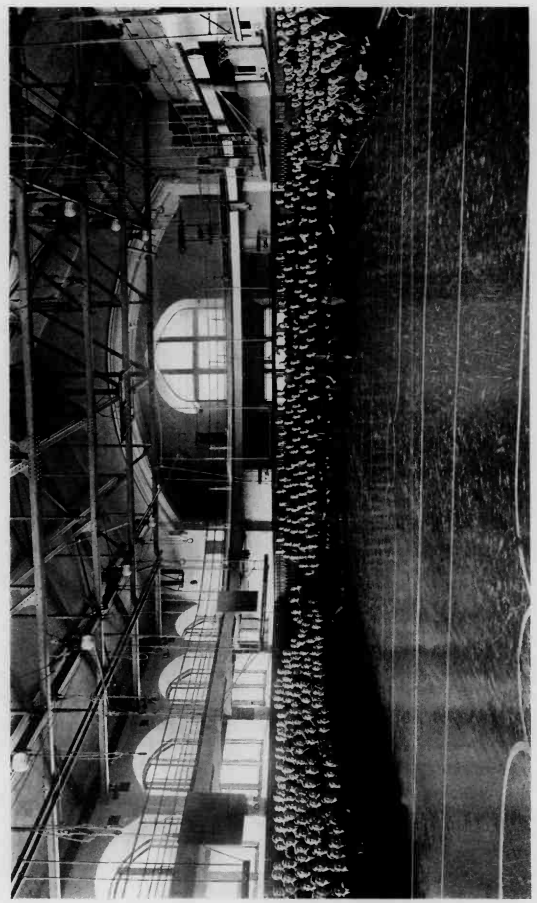


PORTABLE BLEACHERS IN USE

FINAL TERM EXAMINATION

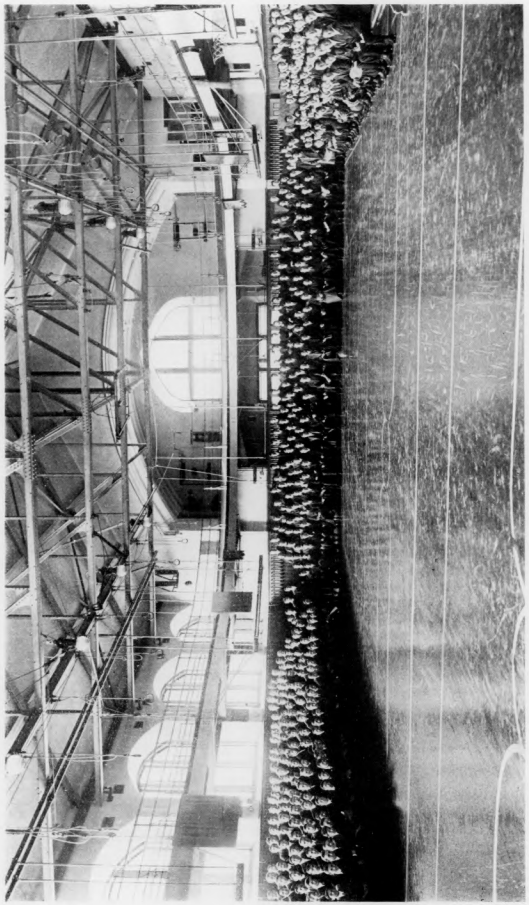
ANNOUNCEMENT AND CURRICULUM.

A. ANNOUNCEMENT.

"THE ORGANIZATION in this department has been planned primarily to give the student such supervision, instruction and experience as will enable him to understand his own peculiar health possibilities and therefore to formulate intelligently his own policy of personal health control. In addition, instruction is offered in a variety of those motor activities that are known to have a desirable influence on the development of neuromuscular strength, endurance and co-ordination, and which are also known to develop certain valuable traits of character.

It is calculated that these educational influences may, on the one hand, teach the young man how to secure and conserve his own health, and, on the other hand, lead him in his graduate years to become an important factor in the advancement of the public health and character.

In addition, this Department is concerned with all those influences within the college which affect the health of the student. Every reasonable effort is exercised to make the institution safe and attractive to the clean, healthy student.



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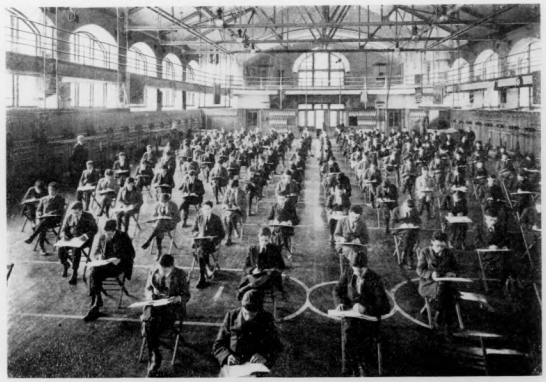

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REGULAR INSPECTION GIVEN EACH CLASS ON REGISTRATION

The following phases of Departmental work are combined for the purpose of securing these results:

1. Individual Instruction in Hygiene.

This instruction is of a personal character, and is given in the form of advice based upon medical and hygienic examinations and inspections of the individual.

(a). Medical and hygienic history and examinations.

In this relationship with the student, the department attempts to secure such information concerning environmental and habit influences in the life of the student as may be used as a basis for supplying him with helpful advice concerning the organization of his policy of personal health control. The medical examinations are utilized for the purpose of finding physical defects whose proper treatment may add to the health possibilities and personal efficiency of the student.

Prescribed: Arts and Science, Classes "C," "B," "A," Freshman, Sophomore and Junior. Once each term. No credit.

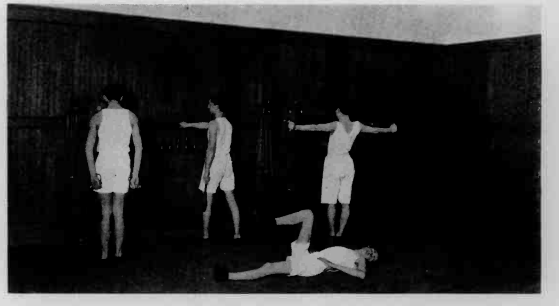
(b). Hygienic inspections.

These inspections are applied in the mutual interest of personal, departmental and institutional hygiene.

Prescribed: Arts and Science, Classes, Freshman and Sophomore.

(c). Conferences.

All students who have been given personal hygienic or medical advice are required to report in conference by appointment in order that the advice may be followed up.



SPECIAL EXERCISING ROOM

All individuals found with communicable diseases are debarred from all classes until it is shown in conference that they are receiving proper medical treatment, and that they may return to class attendance with safety to their comrades.

All individuals found with remediable physical or hygienic defects are required to report in conference with evidence that the abnormal condition has been brought to the serious attention of the parent, guardian or family medical or hygienic adviser. Students failing to report as directed may be debarred from all classes.

II. Medical and sanitary supervision.

(a). Sanitary supervision.

An "Advisory Committee on Hygiene and Sanitation" with the Professor of Hygiene as Chairman has been appointed by the President. This committee has been instructed to "inquire from time to time into all our institutional influences which are likely to affect the health of the student and instructor, and to make such reports and recommendations to the President as may seem wise and expedient."

(b). Board of Health Regulations. Reports of contagious cases in all the Boroughs of Greater New York are daily received from the Board of Health, and under Section 145 of the Sanitary Code, all students exposed to contagious diseases are debarred from further attendance until properly certified by the Board of Health.

(c). Medical Consultation.
Open to all students.

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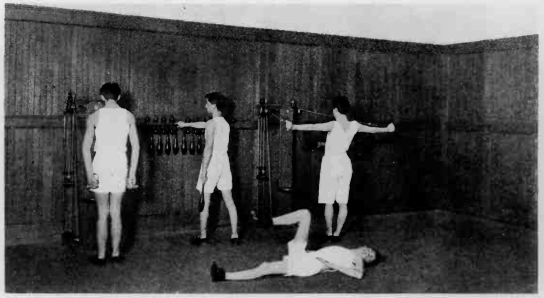

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ROOM FOR ATHLETIC SUPERVISION

(d). Medical Examination of Athletes.
(See "c" under VI).

(e). Treatment.
Emergency treatment is the only treatment attempted by the Department.

(f). Conference.
(See "c" under 1).

(g). Laboratory: The Department Laboratory is equipped for efficient bacteriological and chemical analyses. The water in the swimming pool is examined daily. The laboratory services will be utilized to identify typhoid and diphtheria carriers, and in every other reasonable way to assist in the protection of student health.

III. Lectures in Hygiene.
Four Terms, sixteen lectures each term.
(a). Some of the common causes of disease.
(b). The carriers of disease.
(c). Defenses against Disease.
(d). The Nature of some common diseases.

IV. Instruction in Physical Exercise.
(a). Drills. Graded through four terms.
(b). Apparatus. Graded through four terms.
(c). Swimming. Graded through four terms.
(d). Games and outdoor exercises, four terms.

PORTABLE BLEACHERS IN EXERCISING HALL

V. Written and Practical Examinations.

(a). Daily examinations in personal hygiene (inspections).

(b). Monthly examinations, both written and practical.

(c). Term examinations. Final written examinations.

VI. Athletic Control.

(a). Under the direction of the Faculty Athletic Committee.

(b). Professor of Hygiene is Chairman of Faculty Athletic Committee.

(c). Professor of Hygiene as medical examiner passes on all candidates for teams. No candidate may begin training until approved.

(d). Members of Faculty Athletic Committee are members of Executive Board of the Athletic Association.

(e). No money is paid out by the Athletic Association without the approval of the Chairman of the Faculty Athletic Committee.

(f). Regulations of the Intercollegiate Athletic Association are enforced.

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B. CURRICULUM.

Course I. Elementary Hygiene.

(a). Lectures. "Some of the Common Causes of Disease." These lectures deal with bacteria, protozoa, filtrate viruses, higher animal parasites, the unknown causes of disease, and the contributory causes of disease. The general nature, distribution, transmission and modes of pathogenic action of those agents are discussed simply and without technicality. Sixteen lectures.

(b). Physical Exercise.

1. Graded mass drills.

(a). Elementary drills are used in order to develop obedience and ready response to command, accurate execution, good form and carriage and facility of control.

(b). More advanced drills are given in which movements are made in response to commands. Strength, endurance and co-ordination are brought into play. Only fundamental and larger accessory movements are utilized. These exercises affect chiefly the larger muscle groups and the organs of circulation and respiration.

2. Apparatus work. Graded exercises for squads of five students each on the track, horizontal ladder, chest weights, rings, horse. These exercises develop persistance, speed, strength, endurance and co-ordination; exercise the organs of circulation and respiration; and develop self-control, self reliance and courage.

3. Out-of-door work when the weather permits.

4. Swimming. Each student is required to learn to swim with more than one variety of stroke.

Prescribed: Freshman; first term, two hours a week, counts 1-2.

Course II. Elementary Hygiene. (Continued).

(a). Lectures. "The carriers of disease." A discussion of the human being as a carrier of disease and his relation to the dissemination of the organisms of disease by means of such secondary carriers as food, water, dust, air, flies, mosquitoes and other insects and animals.

(b). Physical Exercise.,

1. Graded Mass Drills. Two count movements for the further development of strength, endurance, and co-ordination, and for the further exercise of the organs of circulation and respiration. These drills are continuations of, but more advanced than, those given in the preceding term.

2. Apparatus work. Graded exercises for squads of five men each on indoor track, horse, vaulting bar, mat and buck. These exercises secure a further development of the anatomical, physiological and psychological objects noted in 1.

3. Out-of-door work when weather permits.

4. Swimming. Each student is required to develop endurance in swimming.

Prerequisite 1.

Prescribed: Freshman; second term, two hours a week, counts 1-2.

Course III. Advanced Hygiene.

(a). Lectures. "Defenses against disease." These lectures deal with certain natural defenses against the organisms that cause and carry disease, such as the biological requirements of micro-organisms, and the physiological defenses of the human being. They further deal with measures that may be utilized by the individual and the community for protection against disease.

(b). Physical Exercise.

1. Graded mass drills. Four count movements. More advanced work making greater demands on speed, strength, endurance and co-ordination, and on the circulation and respiration, and securing a further development of good carriage and form.

2. Apparatus work. Graded exercises for squads of five on the buck, horizontal bar, parallel bars, and the pieces already covered in the earlier terms. These exercises are planned for the further development of the objects previously outlined.

3. Out-of-door work when weather permits.

4. Swimming. Diving, rescue and resuscitation of the drowning.

Prerequisite: 2.

Prescribed: Sophomores, first term, two hours a week counts 1-2.

Course IV. Advanced Hygiene, (Continued).

(a). Lectures. "The Nature of some common diseases." These lectures deal with the economic importance, the causes, symptoms, and prophylaxis of such diseases as tuberculosis, pneumonia, malaria, syphilis and gonorrhoea. Sixteen Lectures.

(b). Physical Exercise.

1. Advanced graded mass drills. Eight count movements.

2. Advanced graded apparatus work. For squads of five.

3. Games; wrestling, and swimming. (See under 5).

4. Out-of-door work when weather permits.

5. Swimming. Advanced continuation of requirements outlined for courses two and three.

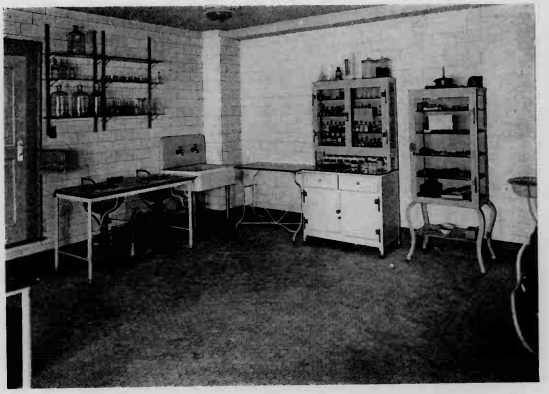
The Instruction in physical exercise in this term is planned to secure a further development of self-control, self-reliance, self-respect, courage, team work (appreciation of the value of a unity of effort), loyalty, and the courtesy of sport, in addition to those anatomical, physiological, and practical hygienic objects that are in view throughout all the instruction.

Prerequisite: 3.

Prescribed: Sophomore; second term, two hours a week, counts 1-2.

Note: In each of the above compulsory courses provision is made for those students whose organic condition may permanently disqualify them for the regular schedule work.

Voluntary Classes. These are organized at such times of the day as do not conflict with the required work. They are open to all collegiate students without credit. Opportunity is given in these classes for advanced work and for experience in certain phases of normal work."



EXAMINING ROOM. THE CENTER OF ALL ACTIVITIES CONNECTED WITH INDIVIDUAL INSTRUCTION IN HYGIENE

PLAN OF WORK.

INDIVIDUAL INSTRUCTION IN HYGIENE.

IN THIS Department "Individual Instruction Hygiene" is applied through hygienic examinations, inspections, and conferences, administered at least once each half year to every pupil in the preparatory department and to every student in the first, second and third year classes in the collegiate department. The pupils in the academic department are sent to the examining room in sections. The college students make their engagements for examinations through the office of the Dean. The examinations are made in order to discover the presence of organic, hygienic or functional conditions which may be working against the health interest of the individual or his associates. Each examination is made by a member of the departmental staff, trained and equipped to do the work asked of him. The examinations are much like those made by any careful physician. A record is secured covering the important

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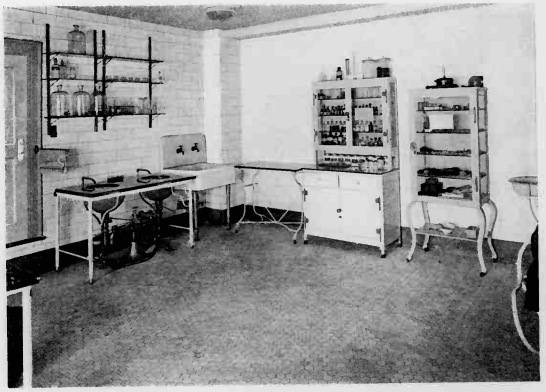

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EXAMINATION FOR DEFECTS OF VISION

hygienic and other health factors bearing on the family life, such as parental birthplace and occupation, and family disease and mortality. We learn what the boy can tell us about his own previous sicknesses. We record previous injuries, strains or operations, and histories of headache, eye weakness, eye disease, ear troubles, colds of the nose, throat and lungs, obstructed nasal breathing, cough, expectoration, bloody sputum, afternoon temperature, night sweating, loss of weight or strength, vaccination, amount and variety of exercise, open air life, amount and character of sleep, window supply and ventilation of bedroom, appetite, time spent at meals, habit of chewing, condition of teeth, dental service, habits of defecation, habits of bathing, care of underclothing and use of tobacco. This information is secured through blanks which the boy fills out.

In addition, there is an examination of clothing, skin, hair, nails, vision, eyes, nose, teeth, mouth, tongue, throat, heart, lungs, and such other special conditions as appear necessary. After his examination each boy is given such advice as seems necessary and appropriate for the improvement of his habits of eating, excretion, exercise, rest and cleanliness. If there is a physical condition found that appears to need treatment, the fact is entered on a card and sent to the boy's parent or guardian with the request that the card be referred to the regular family adviser, parental, medical or dental as the case may be.

EXAMINATION FOR EVIDENCE UPON WHICH TO BASE INDIVIDUAL INSTRUCTION IN PERSONAL HYGIENE

The important feature in this plan of instruction which is distinctive and which makes it effective is this:—Every piece of advisory instruction is followed up, and every piece of such instruction must bring a result. The boy must follow directions to this extent: He must report within a reasonable time and bring with him legitimate evidence that he has followed the advice given, or bring a note from his parent or guardian showing why he has not followed this advice. If this is not done the boy is debarred from all his classes until he does as directed.

And so along with the short lectures that are given to these classes covering the main facts of hygiene, this individual instruction of these same pupils and students in securing through the parent, the family doctor and the family dentist, many personal direct applications of the lessons taught in these lectures. We are securing health habits in the same individuals to whom we are teaching health principles; and the boy is under this instruction, term after term, for six years.

This plan of individual instruction has been developed gradually during the last four years. In the academic year ending June 1, 1910, approximately three thousand boys of high school and college age were required to take this instruction. There boys were seen over nine thousand times (9406). We gave special advice to 2679 individuals. We found 5602 points upon which it seemed to us wise to offer instruction, and it took 7863 conferences to follow this advice to a finish under our rule. During

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that year forty-seven boys whom we advised in this manner dropped out of school. How many of these forty-seven boys left primarily because they failed to observe the rule operating under this requirement cannot be stated. It may be said that during that year we gave individual instruction to nearly three thousand boys; that we examined each of these boys on the average three times; that we found on the average two reasons for offering advice to each individual; and that we saw each of them on the average three times in addition in order to follow up this advice. We found it necessary to see these boys altogether about eighteen thousand times in order to secure the results we were after.

The accomplishment of that year's work required more or less time from nine members of the staff and cost in total something over two thousand five hundred hours during the year. We were busy for approximately thirty-two weeks. The work was about the equivalent of that of two men working eight hours a day, five days in the week, for thirty-two weeks.

This Department is not old enough, and its plan of instruction has not been long enough in operation to justify a final conclusion as to the extent of its effectiveness. This phase of the work is the newest development in the Department. But it is already evident that the occasion for giving advice along various lines is rapidly decreasing. The habits of personal hygiene among our boys are becoming more and more satisfactory. The gymnasium uniforms and towels furnished by the boys are characteristically clean. The care and the condition of the teeth is better. There are fewer cases of uncorrected defects of refraction. We have practically no communicable diseases of the skin, eyelids, or other organs of the body that are not under proper and effective home and departmental supervision.

We have the written and objective evidence that the parents of several thousand boys are taking active, sympathetic, and dollar and cent interest in the health habits, the personal hygiene of their boys.

The percentage of parents that refuse to secure treatment is very small. For the year ending June 1, 1911, the number in this class was seven-tenths of one per cent., and for the year ending June, 1912, it was eight-tenths of one per cent.

The routine involved in following up this instructional advice may be outlined as follows: At the time of his examination each boy is seen by a member of the staff with all the results of his preceding examination or examinations recorded on cards made out for that purpose. The instructor then goes over the boy's record with him and advises him as to what has to be done and what ought to be done for the improvement of his health habits and his physical condition. As he proceeds with this advice, the instructor makes out a "Conference Card." This card contains the boy's name, his address, his class and section in the school, frequently

his schedule of recitations, and a record of each "diagnosis" for which advice has been given.

The boy himself is given a card which contains a record of the things to which his attention has been called and a memorandum of the date or dates on which he has been directed to return for conference. Finally, he is given a card containing a communication to his father with a request for a record of his physician's or dentist's examination and treatment on the back of the same card.

These various cards are so printed as to require a minimum of clerical work in filling them out.

After the boy has received this instruction, the conference card is filed away. When the boy returns for conference his conference card is drawn and on it is recorded the fact that treatment has been promised, secured or refused. If the case cannot be closed in this way at this conference, a record is made of the fact that the boy reported and he is given a new date for subsequent conference.

The file of conference cards is gone over regularly every day or two. All delinquent boys are warned that they should report as directed. This "warning" is accomplished in one of two ways; either the boy is seen personally in the class room, or a letter is sent him, addressed to his home. In the latter case the letter reads that the boy will be debarred from all classes unless he reports to the central office of the school on or before a certain date with a communication from this Department stating that he has satisfactorily followed directions. If the boy then fails to report he is debarred from all classes, and can be reinstated only on recommendation from the Department of Hygiene.

In those instances in which treatment is promised, the cases are followed up at longer intervals in order to secure a record of what is done. The boy is reminded of his promise at fairly frequent intervals by means of this plan.

The success of this "follow up" system during the year ending June 1, 1912, may be seen in the following statistics:

	1st term	2nd term
Number of boys given instructional advice	1051	936
Number of diagnoses followed up	1542	1409
Number of conferences necessary to follow up all cases	2244	1925
Number of 'diagnoses' recorded as 'under Treatment'	73	158
Number of 'diagnoses' recorded as having 'secured treatment'	1298	1093
Number of 'diagnoses' recorded as having 'refused treatment'	11	10
Number of 'diagnoses' recorded as having 'promised treatment'	108	102

	1st term	2nd term
Left college	48	40
Number of parents refusing to secure treatment	9	8
Number of individuals warned	328	290
Number of individuals debarred	71	92
Number of individuals reinstated	67	85
Number of individuals that remained debarred	4	7
Number of dentists consulted privately	273	256
Number of opticians consulted privately	22	16
Number of physicians consulted privately	189	139
Number of dental clinics attended	3	4
Number of hospitals attended	24	14
Number of students securing private dental service	320	310
Number of students securing private medical service	204	147
Number of student securing the service of opticians	15	18
Number of students securing free dental service	8	13
Number of students securing free dental service	4	5
Number of students securing free clinical service (dental)	0	3
Number of students securing free clinical service (medical)	10	11
Number of students securing service of optician free	0	0
Total number securing private service	539	475
Total number securing free service	22	32
Total number for whom home treatment was sufficient	490	429

These Statistics justify the following conclusion:

First. This medical inspection is effective. It is securing the repair of physical defects and it is correcting unhygienic conditions in over ninety per cent. of the cases in which such treatment is desirable. This plan of individual instruction in personal hygiene is improving the physiological efficiency of at least a thousand boys every half year.

Second. This plan of individual instruction in personal hygiene has met with the support of the parents of practically all our boys. Less than one per cent. of the parents refuse treatment, No system can endure without such support.

Third. It is safe to expect that this continued personal relationship extending throughout the high school period and covering the first three collegiate years will develop permanent habits of personal health control in many, if not in most of the boys under our supervision.

STUDENTS RECEIVING CARD RECORDS AFTER EXAMINATION AND PRIOR TO ADVISORY CONFERENCE WITH INSTRUCTOR

RELATION OF THIS INDIVIDUAL INSTRUCTION TO THE FAMILY ADVISER*.

"DURING THE term ending January 31, 1912, we examined 1800 boys, the great majority of whom were in Townsend Harris Hall, the preparatory department of the College of the City of New York. Special advice was given to 1051 individuals, i.e. 58 per cent. One thousand five hundred and forty-two diagnoses were made upon these 1051 individuals. It was necessary to see these individuals upon whom these diagnoses were made 2244 times in order to follow up all the special and important advice given. From this it would appear that it now takes on the average three contacts with each individual to whom advice is given in order to see that he has secured, promised, or refused treatment. We found that these 1542 diagnoses upon which special advice was given were disposed of as follows:

*Presented before the sixth Congress of the American School Hygiene Association, Boston, Mass., March 28, 1912.

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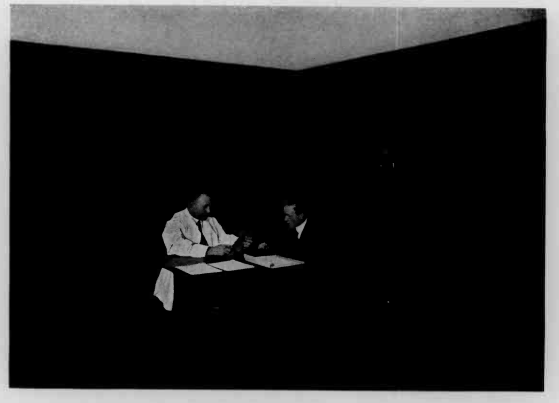
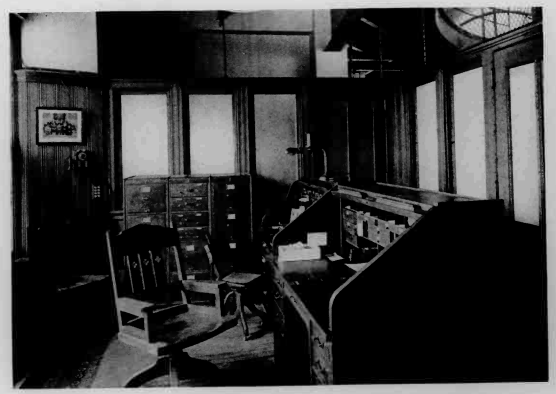


ADVISORY CONFERENCE WITH INSTRUCTOR IN HYGIENE

1248 i.e. 80% secured treatment.
73 i.e. 4% are under treatment.
108 i.e. 7% promised treatment.
11 i.e. 1-10 of one per cent. refused treatment.

The remaining eight per cent. dropped out of school. This 8 per cent. may be explained as follows: Four individuals, that is two-thirds of one per cent., were dismissed from school for not reporting to us as directed, and 48 left probably for other reasons. During the term in which these statistics were secured, each boy was asked if he would not voluntarily state the cost of the services which he secured. We have taken particular pains not to appear to demand such a statement. We are disposed to accept these voluntary reports from the boys as reliable because in each case we received a written communication from the medical or dental adviser concerned stating that he had given advice to the student.

We find that about one-half the individuals to whom we give advice are not in need of expert help. In other words, one-half of our advice was given concerning health habits which the boy can establish and manage without going to the dentist or the doctor. The other half of our advice was of a character that needs medical or dental attention. Our returns show that this group numbered 525 individuals. Of this number, 354 secured private advice and paid $2374.65 for that advice. One hundred



GYMNASIUM OFFICE

and forty-nine secured private advice and paid for it, but did not know how much. Only thirty-two secured free service. These returns indicate that over 94 per cent. of these boys go to private medical or dental practitioners for service, and pay on the average seven dollars apiece for that service. If this be true, the 535 individuals to whom we suggested the need of medical and dental advice last term spent $3500 in order to secure that advice.

These figures are very much like those secured in previous years. For instance, on the basis of our general recommendations for the year ending June 1, 1911, the parents of 980 boys secured the services of 580 physicians; the parents of 1150 boys secured the service of 536 dentists; the parents of 83 boys secured the services of 41 opticians; the parents of 108 boys sent their sons to 37 free hospital clinics; and the parents of 78 boys sent their sons to 21 free dental clinics. Our records for that year indicate that more than 1100 professional men were employed for this service and that they received over $12,000 in compensation for their services. These figures do not include several cases of typhoid fever discovered in our regular routine, nor do they include a number of cases operated on for hernia and appendicitis for which the parents paid regular fees.

It is evident, then, that medical inspection in Townsend Harris Hall is not throwing a burden on the free clinics of New York City. Townsend Harris Hall is classed with the high schools of New York City. It draws its boys from the grammar schools

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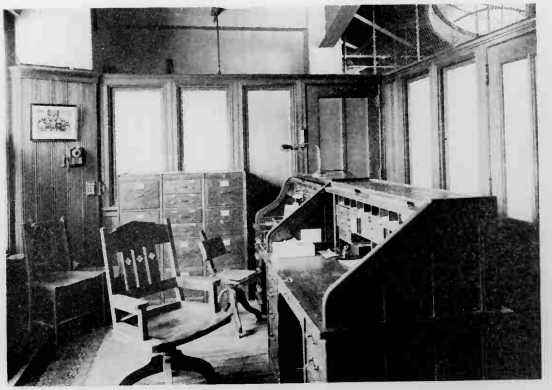

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CHECKING UP DAILY REPORTS FROM THE BOARD OF HEALTH

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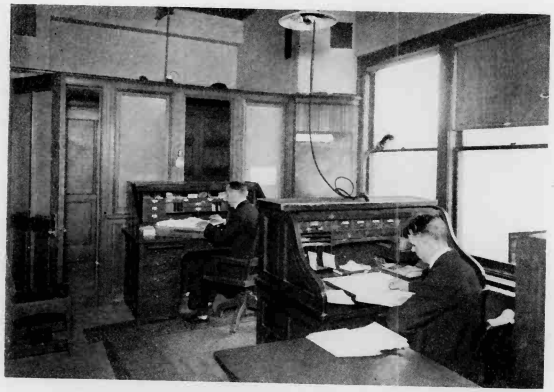
EXAMINATION OF INDIVIDUAL FOR INFORMATION CONCERNING HIS PERSONAL HYGIENIC NEEDS

MEDICAL AND SANITARY SUPERVISION.

This phase of departmental work is concerned with the restriction or limitation or removal of contributory causes of disease; with the improvement, where possible, of those environmental institutional influences which affect health; and with the detection and removal of the carriers of disease that not uncommonly appear among high school pupils and college students. It is necessarily intimately associated with our individual instruction in personal hygiene.

The advisory Committee on Hygiene and Sanitation is authorized to report its advice and suggestions to the President concerning the buildings, material, equipment and other institutional influences that enter into the sanitary problems of the College.

The department receives each day from the Board of Health of Greater New York a printed list containing the name and addresses of all families in which various contagious and communicable diseases have appeared during the preceding twenty-four hours. An assistant in the department checks up this report with a card catalogue of all the students in the day classes, in the evening classes and all the pupils in the preparatory department. This work consumes about three hours of time each day. During the term ending July 1, 1913, over thirty-one thousand addresses were checked up and fifty cases were found in which students were in attendance in the college or in the preparatory department who had been exposed to contagious diseases at home. The rule of the Board of Health was enforced and the individuals concerned were required to remain out of classes until reinstated by that Board.



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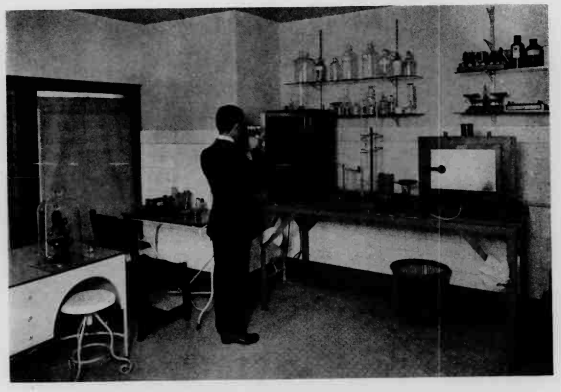

DEPARTMENTAL LABORATORY

The medical consultations open to all students who desire information or advice concerning their physical condition not infrequently discover incipient, acute disease to the examiner. Typhoid fever, appendicitis and other of our common diseases are present in these findings. All students who have been out of college or away from the academic department on account of illness for a week or more are required to present themselves for consultation in this department before readmission to their classes. This requirement has occasionally discovered to the examiner cases that appear to be carriers of disease after convalescence has been well established.

The department attempts no treatment of any sort except that which is obviously purely protective, emergency treatment. All cases in need of treatment are referred to the regular family adviser through the parent or guardian. The individual concerned must report at a later date with evidence that this matter has been brought satisfactorily to the attention of his parent or guardian. In this manner treatment of contagious and communicable diseases is forced, if necessary, and the department secures regularly satisfactory assurance that the students condition is receiving the mature consideration of those at home.

The departmental laboratory is equipped with such apparatus and supplies as are necessary for the detection of the ordinary disease carriers. This equipment is discussed at greater length elsewhere.

REGULAR MONTHLY WRITTEN EXAMINATION

LECTURES.

ALL CLASSES taking required work in this department in courses 1, 2, 3, and 4 are given at least once each week a short talk on health. Each class receives no less than sixteen of these "floor talks" each term. During the last five years these talks have been of about ten minutes' duration each. In the coming year it is planned to lengthen them to twenty minutes. An effort has been made in these discussions to include the common, practical problems that enter into the hygiene of daily life. In a general way the subject matter includes a series of discussions upon the following topics: (1) the common causes of disease; (2) the common carriers of disease; (3) our common defences against disease; and (4) the nature of some of our common diseases. It is evident, then, that a special effort is made to give the student an intelligent knowledge of the main and important facts which must inevitably bear upon any plan for the acquisition and conservation of health. It is assumed that a young man will be more intelligently healthy if he

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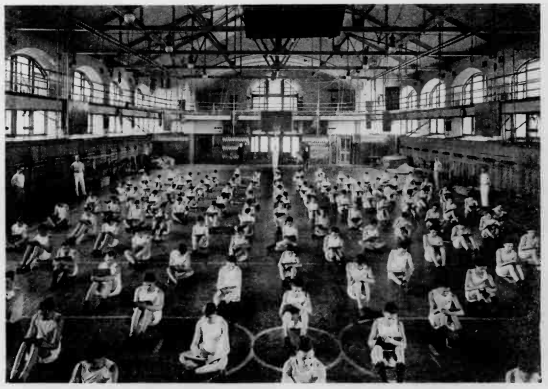

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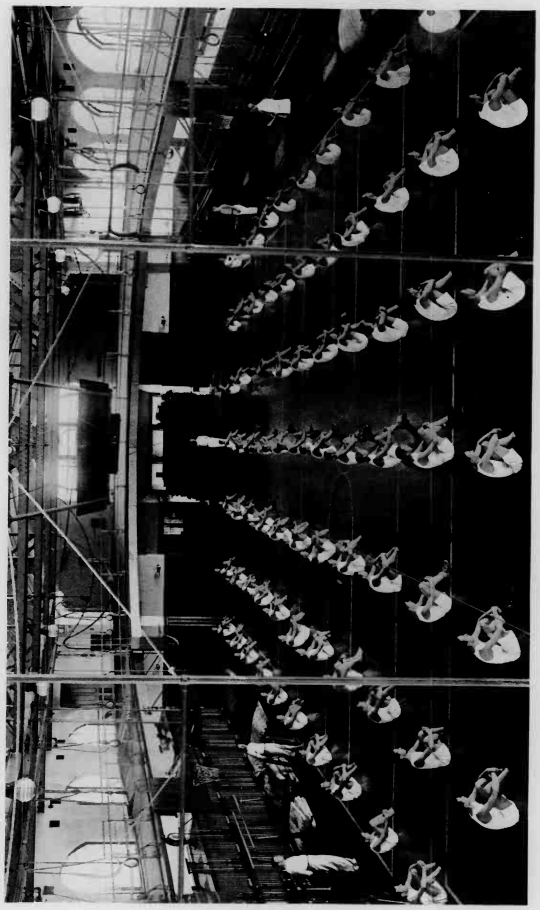

"FLOOR TALK" ON HYGIENE

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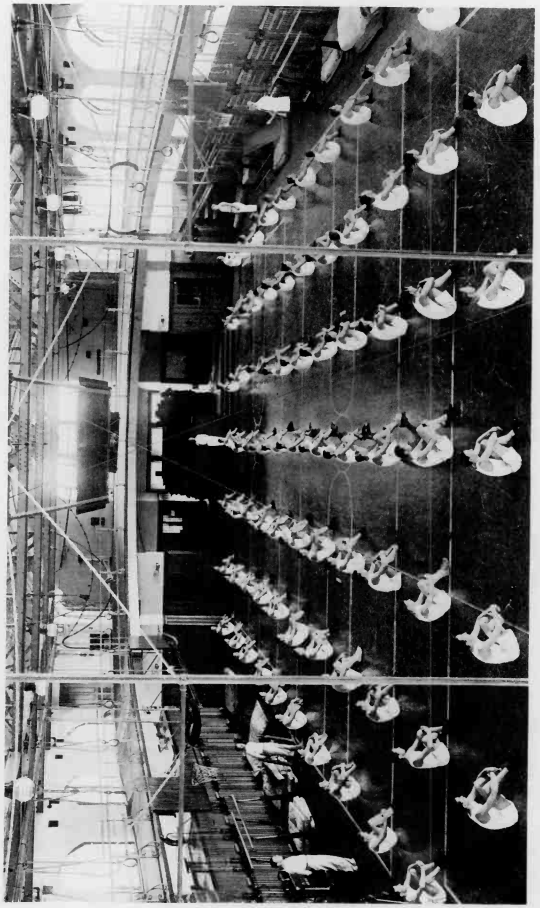
A very definite and persistent effort is made to correlate these "floor talks" with the facts brought out in the medical and hygienic examinations and inspections referred to above in our discussion of what is done in individual instruction in personal hygiene. The various discussions of the relation between cleanliness and health fit in with the rule that no unclean uniform is permitted on the floor of the gymnasium, no unclean towel is allowed in the locker room, and no unclean individual may remain long in either the preparatory or the collegiate department. In the same way the discussions of the important facts connected with dental hygiene are associated pretty closely with the mouth examinations made. This combined instruction in the theory and practice of hygiene is the dominating feature in the department.



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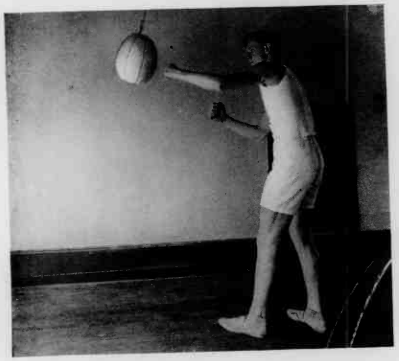


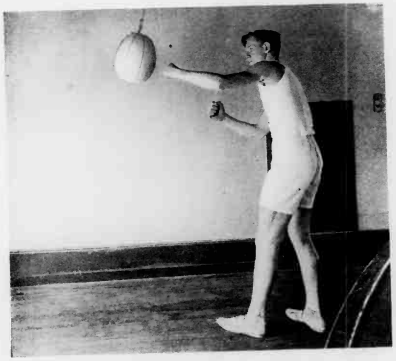
BAG PUNCHING

SQUAD WORK ON THE APPARATUS

INSTRUCTION IN PHYSICAL EXERCISE.

IN THIS department we regard physical exercise as a health habit. It is looked upon as one of the most important of all our health habits. A persistent effort is made, however, to lead the student to a full realization of the fact that there are other health habits of equally serious importance. At no time is an opportunity neglected to emphasize the necessity for wise habits of nourishment, wise habits of excretion, wise habits of rest and the intelligent avoidance of the causes and carriers of disease, as well as the importance of reasonable habits of exercise.

The work in physical exercise is made up of mass drills, apparatus work, swimming, exercise on the indoor track, certain indoor games, and out-of-door cross country running when the weather permits. The City of New York has recently given the College two entire city blocks lying immediately to the south of the departmental building. It is now planned to develop there a track and field of practical use for required, supervised class and squad work. These conveniences will then be an intimate part of the departmental equipment. When these plans are realized, instruction in physical exercise will include a considerably larger amount of out-of-door work than is now possible.



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The work in physical exercise is made up of mass drills, apparatus work, swimming, exercise on the indoor track, certain indoor games, and out-of-door cross country running when the weather permits. The City of New York has recently given the College two entire city blocks lying immediately to the south of the departmental building. It is now planned to develop there a track and field of practical use for required, supervised class and squad work. These conveniences will then be an intimate part of the departmental equipment. When these plans are realized, instruction in physical exercise will include a considerably larger amount of out-of-door work than is now possible.

CLASS WORK IN SWIMMING

A MASS DRILL IN THE EXERCISING HALL

REQUIRED CLASS WORK.

THE REQUIRED class work outlined in this announcement above and described in a general way in several of the preceding paragraphs is prescribed for the Freshman and Sophomore classes in the Collegiate Department. There are four of these classes. The courses required of these classes are known as Courses One, Two, Three and Four. Each course is made up of class lectures, mass drills, squad and individual exercise, and a certain amount of individual instruction in personal hygiene.

At present Courses One, Two, Three and Four are required for two periods a week. Each period is made up of thirty-eight minutes of actual instruction. Twenty-two minutes in each hour are devoted to undressing, bathing and dressing.

Each student is required to appear on the floor for class work in a sleeveless white shirt, a pair of white knee running trousers, and a pair of soft soled shoes. This uniform *must* be clean.

The floor of the exercising hall is marked with two hundred and twenty-five numbers. Each student in each class is assigned one of these numbers. When his class is called, the student finds his number on the floor and stands on it. Two assistants record independently the numbers that are vacant. In this way, class order is quickly secured; the class roll easily taken, much time

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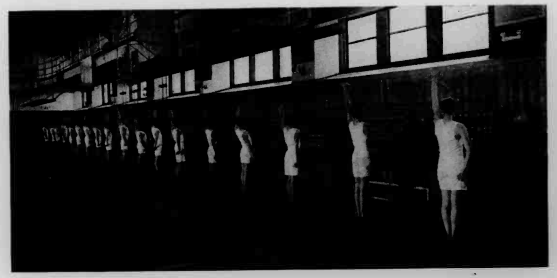
SECTIONS ON THE CHEST WEIGHTS

saved, and no mistakes are made. Tardiness is not permitted. All absences must be excused. Unsatisfactory excuse may lose the individual his place in his class.

A typical class hour is divided into three parts. A short talk on hygiene is given immediately after the class is called. It is rather unique to see one or two hundred students dressed in clean white uniforms listening to a discussion of the laws of health which they in a few minutes are going to put into practical application. These lectures, as indicated above, are carefully graded and are in logical sequence throughout the four terms. A special effort is made to present only matters of practical importance, applicable to the surroundings and health problems of the young men of New York City. The lecture is followed by a mass drill. These drills are varied at frequent intervals and are graded throughout the four terms. They are all given with certain definite objects in view, such as the physiological effects of rapid respiration, increased heart rate, or local muscular contraction, or the psychological effects of obedience to command, of successful co-ordination, or of accurate execution. The drill is followed by squad work on the apparatus. Each squad is made up of five students grouped together with reference to their physical ability. These squads are assigned work on the various pieces of apparatus in the building. Some of them work on the chest-weights, others on the track, others drill, swim, or work on the bars or mats. When the weather permits, squads are sent out on cross country runs as a part of the work in the "apparatus" period. When the new field is available we hope to extend these opportunities for



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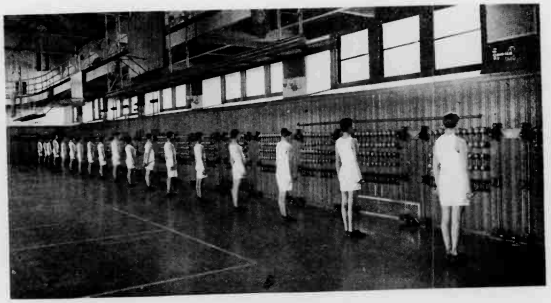

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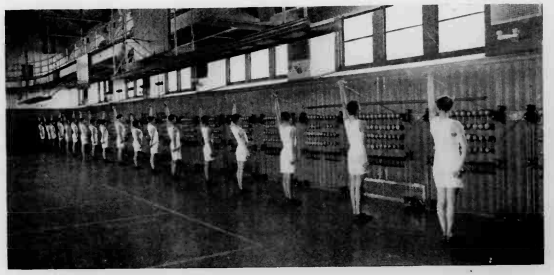

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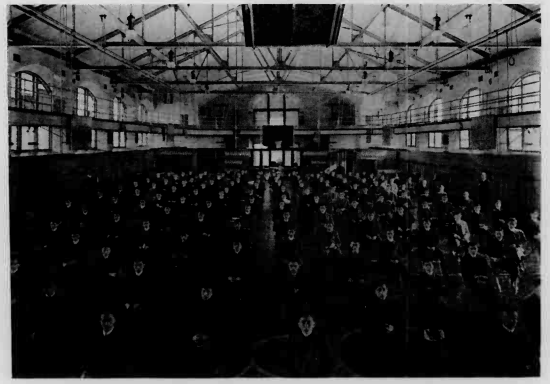

FIRST APPEARANCE

A CLASS REPORTING FOR ENROLLMENT

MONTHLY PRACTICAL EXAMINATION

EXAMINATIONS

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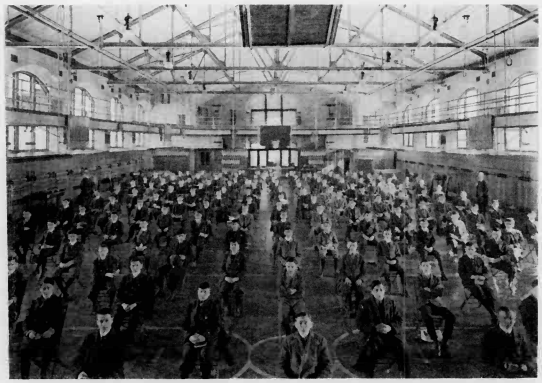

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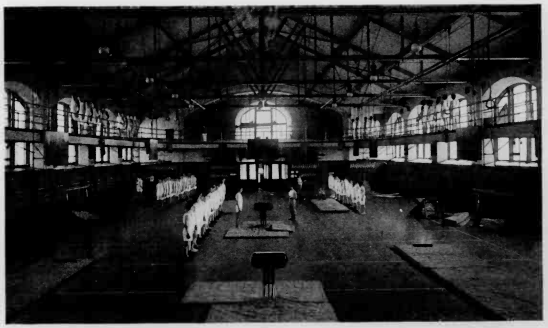

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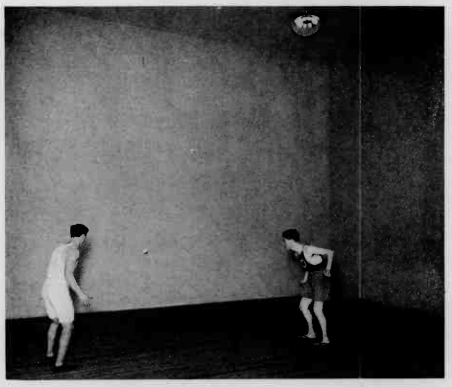


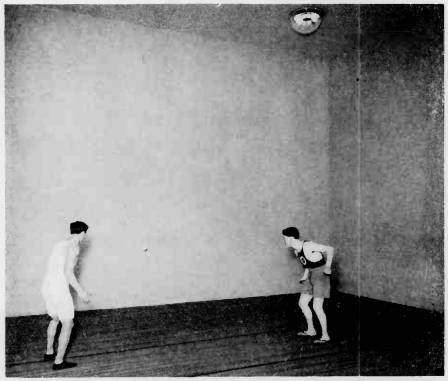
HAND BALL

SUMMARY.

FROM THE foregoing statements it is evident that the Department of Hygiene in The College of the City of New York is concerned with various of the influences which affect human health. It offers instruction in the principles and practice of hygiene. This instruction includes lectures on hygiene; class work in such health habits as physical exercise and personal cleanliness; individual instruction concerning personal hygiene and the meaning of and wise care of remedial physical defects, and human disease carriers; and personal instruction concerning the relation of the individual to the problems of social and community hygiene. It offers a protective and preventive community medical supervision.

We believe this departmental organization, which secures a combination of medical and hygienic supervision with instruction concerning the simple fundamental laws of health, and with experience in the more important health habits, is logical and well balanced. We believe that under such combined influences, physiological and hygienic and, therefore, health improvement is inevitable. Each student should leave us knowing how to secure and conserve his own health. He should leave us in better condition than we found him. He should go from us with high ideals concerning his personal responsibilities in matters relating to the public health.

We hope and plan each year to furnish better nourished and healthier bodies for the academic purposes of the College. We hope and plan each year to send out a group of healthier, stronger, more rugged, more efficient young men who, because of our influences, will be of greater academic, social, moral, economic and political value as American citizens. We hope and plan to join the other departments of this great College in the development of character and in the making of men.



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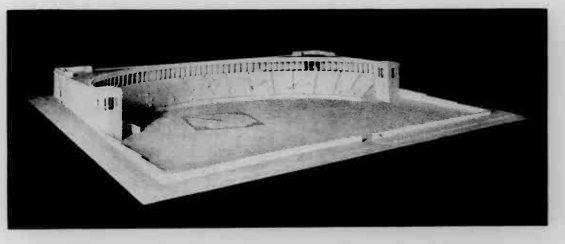
UNDEVELOPED FIELD RECENTLY GIVEN THE COLLEGE BY THE CITY



MODEL OF PROPOSED STADIUM DESIGNED BY ARNOLD BRUNNER

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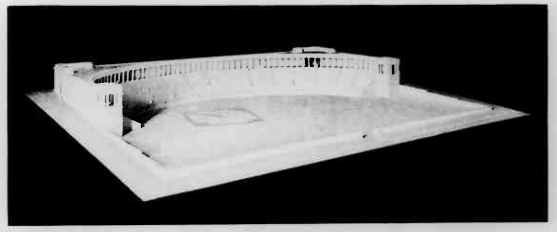

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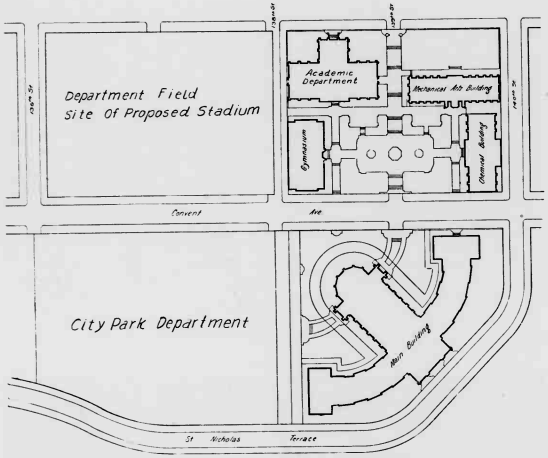
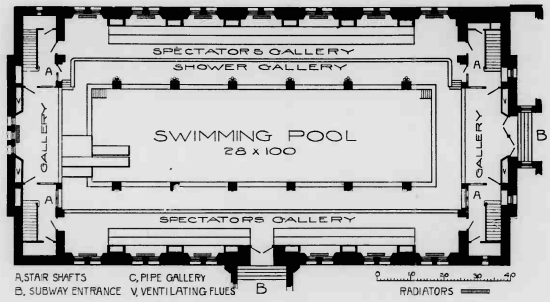
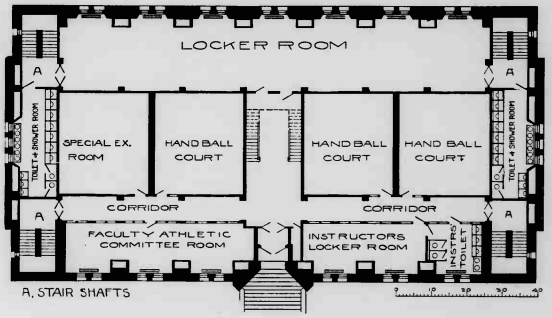


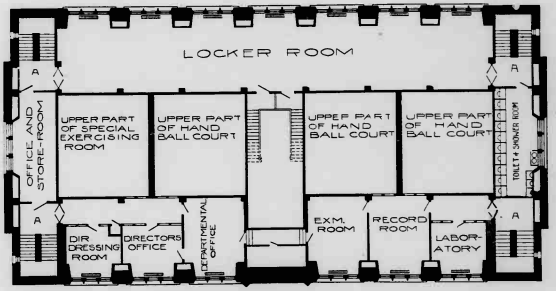
PLAN OF COLLEGE CAMPUS



PLAN OF FIRST FLOOR SHOWING SHOWER SYSTEM
SWIMMING POOL AND GALLERIES

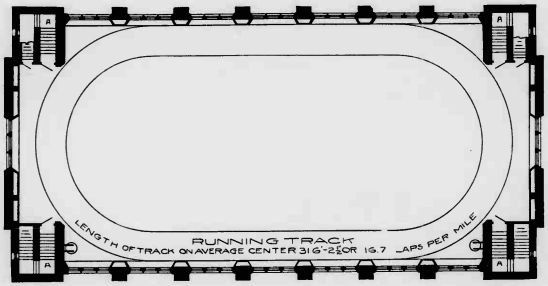


PLAN OF SECOND OR ENTRANCE FLOOR



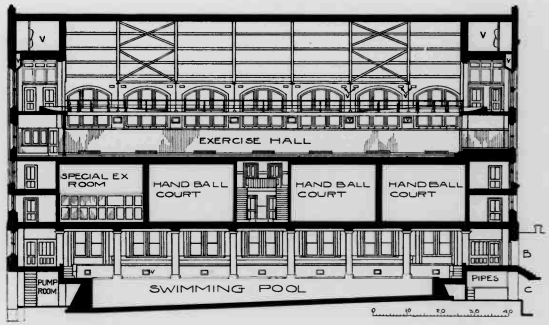
PLAN OF THIRD OR MEZZANINE FLOOR

PLAN OF EXERCISING HALL ON FOURTH FLOOR



PLAN OF RUNNING TRACK

CROSS SECTIONS IN CENTER AND AT END



LONGITUDINAL SECTIONS

APPENDIX

SAMPLE OF FINAL WRITTEN EXAMINATIONS GIVEN EACH TERM.

COURSE ONE—Division One.

"THE CAUSES OF DISEASE."

1. Classify the causes of disease.

2. Classify bacteria on the basis of their relation to disease, and discuss the importance of each class.

3. (*a*) What environmental conditions are favorable to bacterial life?
(*b*) Do pathogenic bacteria live in nature?
(*c*) Do pathogenic bacteria reproduce in nature?

4. Discuss concisely the reproduction of bacteria and point out the significant facts in these processes that bear upon disease.

5. (*a*) How do bacteria ordinarily gain access to the tissues?
(*b*) What conditions modify the probability of infection after bacteria gain access to the tissues?

6. (*a*) Discuss concisely the ways in which bacteria cause disease.
(*b*) Name five bacteria, any one of which has destroyed more human beings than have been killed in all the wars of mankind added together.

7. (*a*) Discuss concisely the cause of malaria.
(*b*) Discuss concisely tapeworm.
(*c*) Discuss concisely trichinae.

8. Discuss concisely pre-cancerous conditions.

9. Discuss concisely the "ultra-microscopic or filtrate viruses."

10. Discuss concisely the contributory causes of disease.

COURSE TWO—Divison One.

"SOME OF THE CARRIERS OF DISEASE."

1. (*a*) What evidence is there that milk may be a carrier of bacterial disease?
(*b*) How may you avoid such disease?

2. (*a*) What evidence is there that drinking water may carry bacterial disease?
(*b*) How would you avoid disease from such a source?

3. (*a*) How may stagnant water become a carrier of malaria or yellow fever?
(*b*) How may this be prevented?

4. Discuss concisely the possibilities of dust being a carrier of disease in air currents.

5. Discuss concisely the sources and importance of droplet infection of air.

6. Indicate in a few words the avenues through which the human being may eliminate pathogenic organisms.

7. Taking into consideration the facts brought out in question six, discuss concisely the relation of the human being to the spread of such diseases as tuberculosis, pneumonia, syphilis, gonorrhoea, leprosy and cholera.

8. (*a*) Why is the fly commonly a carrier of disease?
(*b*) Name five diseases the fly is known to carry.

9. (*a*) What diseases is the mosquito known to carry?
(*b*) Do all mosquitos carry these diseases?
(*c*) Are these diseases carried from man to man in any other way?
(*d*) How are the organisms of these diseases carried from mosquito to mosquito?

10. (*a*) Discuss concisely the rat as a carrier of disease.
(*b*) Discuss concisely the flea as a carrier of disease.
(*c*) Discuss concisely the dog and the cat as carriers of disease.

COURSE THREE—Division Two.

"OUR DEFENCES AGAINST DISEASE."

1. (*a*) Give five reasons why most pathogenic bacteria can not live long in nature.
(*b*) Point out the importance of the fact that pathogenic bacteria can live for even a short time in nature.
(*c*) Discuss the importance of the fact that most pathogenic bacteria can not reproduce in nature.

2. (*a*) How does the skin act as a defence against disease?
(*b*) How do the mucous membranes act as defences against disease?
(*c*) In what ways do the secretions of the eyes (the tears) protect the eye from disease.
(*d*) Name two other secretions which act as defences against disease.

3. Discuss concisely ciliary movement as a defence against disease.

4. (*a*) What is phagocytosis?
(*b*) What cells are the principal phagocytes?
(*c*) How numerous are these cells referred to in question "b"? and what is their importance?

5. Discuss bacteriolysis concisely.

6. Point out the defensive features of inflammation.

7. (*a*) Summarize the importance of diphtheria antitoxin as a defence against disease.
(*b*) Do the same for vaccination against small pox.

8. How may personal, family and community habits be regulated for defence against disease?

9. Discuss the Board of Health as a defence against disease.

10. State five lines of legislation which have been followed for the protection of society against disease.

COURSE FOUR.

"THE NATURE OF SOME OF OUR COMMON DISEASES."

1. Discuss very concisely the features common to infectious diseases, using the following headings:

(1) Cause	(2) Incubation period
(3) Symptoms	(4) Duration of disease
(5) Modes of contagion	(6) Occurrence in epidemics
(7) Preventability	(8) Economic importance

2. Discuss the nature of a "bad cold".

3. Discuss the incidence, mortality and economic importance of pulmonary tuberculosis.

4. (*a*) What does the tubercle bacillus look like?
(*b*) How large is it?
(*c*) What common varieties of tubercle bacilli are there?
(*d*) What environmental conditions are necessary to the life and reproductive activities of tubercle bacilli?
(*e*) Where outside the human body has the bacillus of human tuberculous been found?

5. Indicate five contributory causes of tuberculosis.

6. What are the carriers of tuberculosis?

7. Indicate ten early symptoms of pulmonary tuberculosis.

8. What are the main features of treatment in this disease?

9. Discuss the extreme importance of venereal disease.

10. Discuss the cause, locations, symptoms, carriers, duration and effects of gonorrhoea.

STAFF

Thomas A. Storey, A. B. (Leland Stanford University), A. M. (Leland Stanford Junior University) M. D. (Harvard University Medical School), Ph. D., (Leland Stanford Junior University), Assistant, Instructor, and Assistant Professor of Hygiene, Leland Stanford Junior University, 1896–1906. Graduate, Boston City Hospital, Long Island, 1905. Resident House Physician, Boston Children's Hospital, 1906, Secretary-General Fourth International Congress on School Hygiene, Professor and Director.

Lionel B. McKenzie, Brookline Municipal Baths, 1900–1906, Special Instructor.

Frederic A. Woll, B. S. Teachers' College, A. M. (Columbia) Diploma, Harvard School of Physical Education. Master's Diploma in Education, Teachers' College, Columbia University. Graduate Student, New York University. Student Assistant, Harvard Summer School of Physical Education, 1903–1905. Instructor in Physical Education, Columbia University Summer School, 1906–1910, Instructor Extension Courses, Columbia University, 1910. Instructor.

William B. Boyd, B. S. (College of the City of New York), M. D. (College of Physicians and Surgeons, Columbia University). Junior Teacher of Physiology and Physical Training, High School of Commerce, 1902–1903. Graduate Presbyterian Hospital, New York City; Sloane Maternity Hospital, New York City. Lung Clinic O. P. D. Presbyterian Hospital. Tutor.

Edward C. Brenner, A. B., (College of the City of New York) M. D. Columbia University (P. & S.) Graduate Presbyterian Hospital, New York City, Assistant in Medicine, Columbia University, (P. V. S. 1911–1912. Clinical Assistant Polyclinic 1912, Columbia Hospital 1912. Attending Physician Home Hospital 1912. Tutor.

Richard J. O'Neil, Brookline Municipal Baths, 1902–1906. Tutor.

Canute Hansen, Student New York College of Dentistry, Assistant to the Director, Harlem Y. M C. A., 1905–1907, Assistant in Physical Education Columbia Summer School 1909–1910. Director of the Gymnasium, Greenpoint Branch of Pratt Institute, 1907–1909. Tutor.

Leonard L. Palmer, Student (Teachers' College, Columbia University) Vacation Playgrounds, Department of Education, New York City, Assistant Teacher of Physical Training, 1901–1902. Teacher of Physical Training, 1902–1903 Acting Principal, 1903–1906; Principal, 1906. Roof Playgrounds, Department of Education, Assistant Teacher of Physical Training, 1905–1906; Teacher of Physical Training 1906–1909; Principal, 1909; Evening Recreation Centers, Teacher of Physical Training, 1901–1907; Acting Principal, 1907–1909; Principal, 1910. Tutor.

Walter Williamson, A. B., Teacher of Physical Training, Evening Recreation Centers, New York City, (New York University) 1906–1910; Summer and Roof Playgrounds, New York City, 1906–1907; Director of Physical Training, Brooklyn Latin School, 1906–1907; 1908–1909. Tutor.

Walter A. Heard, Student (Teachers' College) Assistant in the Gymnasium, Horace Mann School, 1906–1908. Voluntary Assistant, Columbia University, Gymnasium, 1906–1908. Tutor.

Radford J. McCormick, Brookline Municipal Baths, 1897–1910. Instructor in Swimming, Boston Normal School of Gymnasium and Wellesley College, 1906–1910. Coach, Harvard University Swimming Team., 1907. Tutor.

Henry Hansen, Assistant Greenpoint Gymnasium, 1909–1910; Harlem Branch Y. M. C. A., 1912–13; Teachers' Recreation Center, Newark, N. J., 1912; Principal Recreation Center, Newark, 1913, Tutor.

Ray Forrest Purcell, Teachers' College, New York City, Assistant Tutor.

John T. Lang, Columbia School of Design, (Four years) Diploma Teachers' College. Assistant Tutor.

John J. Dailey, Bacteriological Preparateur, Dept. of Pathology, Cornell University. 1907–12, Amateur Champion A. A. U., Horse, 1909. Assistant Tutor.

Thomas A. Simmons, Amateur Champion A. A. U., Horse, 1910, and Parallels, 1911. Assistant Tutor.

SELECTED TABLES FROM DEPARTMENT REPORT

FOR TERM ENDING JUNE 1913

CHART NO. 1

STAFF SERVICES AND HOURS.

Showing number of hours of service rendered in the various phases of work undertaken by the department during the term ending July, 1, 1913.

A—Hours per week spent in Academic Department.

C—Hours per week spent in Collegiate Department.

FEBRUARY 1913 to JULY 1913	Required Class Instruction.		Required Individual Instruction.		Hrs. a wk. spent in protection from contagious disease.		No. hrs. each wk. spent in supervision of voluntary attendance.		No. hrs. each wk. spent in supervision of athletics.		No. hrs. each wk. spent in administrative work covering all phases of departmental work.		Total No. hrs. service each week for each member of the staff.	No. of hrs. service in miscellaneous duties, 2 wks. at beginning and end of term.
	A.	C.	A.	C.	A.	C.	A.	C.	A.	C.	A.	C.		
T. A. S.,	0	6	8	4	3	2	0	0	0	2	3	12	40	40
L. B. McK.,	4	14	8	0	0	0	0	4	0	10	0	0	40	30
L. L. P.,	4	14	3	0	0	0	0	2	0	7	0	0	30	25
R. J. O'N.,	4	14	10	0	0	0	3	7	0	2	0	0	40	30
F. A. W.,	4	14	8	0	0	0	0	3	0	6	0	0	35	30
W. B. B.,	0	0	14	8	0	0	0	0	0	0	0	0	22	15
W. W.,	4	14	5	0	0	0	0	0	8	5	0	0	36	40
C. H. H.,	2	5	5	0	0	0	6	2	2	0	0	0	22	30
R. J. McC.,	3	9	3	0	8	4	4	3	5	0	0	0	39	30
E. C. B.,	0	0	11	8	0	0	0	0	0	0	0	0	19	15
W. S. H.,	0	6	5	14	0	0	0	7	0	0	0	0	32	30
P. H. R.,	4	8	8	6	0	0	4	9	0	0	0	0	39	30
R. F. P.,	0	11	0	0	0	0	0	5	0	0	0	0	16	15
H. H.,	0	13	0	0	0	0	0	2	0	0	0	0	15	15
J. D.,	2	13	0	0	0	0	0	0	0	0	0	0	15	15
J. L.,	2	8	0	0	0	0	0	5	0	0	0	0	15	5
T. A. S. (2),	0	12	0	0	0	0	0	3	0	0	0	0	15	15
Total per week,	33	161	88	40	11	6	17	52	15	32	3	12	470	420
Total 4 weeks,														1680
Total 16 weeks, Term,	528	2576	1408	640	176	96	272	832	240	512	48	192	7520	
No. hours spent in departmental work each term,														9200

CHART NO. 2

STAFF SERVICES.

Showing number of hours of service given by the members of the staff per week in required class instruction on the basis of sixteen weeks of instructional work each term. (Term ending June, 1913.)

HOURS PER WEEK IN THE VARIOUS CLASSES COVERED.

Staff Officer.	A 1	A 2	L. Fr. 1	U. Fr. 2	L. S. 3	U. S. 4	Total Week	Total Term
T. A. S.,	2	2	1	1	1	1	8	128
L. B. McK.,	2	2	4	4	4	2	18	288
L. L. P.,	2	2	4	4	4	2	18	288
R. J. O'N.,	2	2	4	4	4	2	18	288
F. A. W.,	2	2	4	4	4	2	18	288
W. B. B.,	0	0	0	0	0	0	0	0
W. W.,	2	2	4	4	4	2	18	288
C. H.,	1	2	2	4	2	1	12	192
R. J. McC.,	2	1	3	3	2	0	11	176
E..C. B.,	0	0	0	0	0	0	0	0
W. S. H.,	0	0	2	1	1	1	5	80
P. H. R.,	2	2	1	2	3	2	12	192
R. F. P.,	0	0	3	4	3	1	11	176
H. H.,	0	0	4	3	4	2	13	208
J. D.,	1	2	4	3	3	2	15	240
J. L.,	1	1	2	3	2	1	10	160
T. A. S. (2).	0	0	4	4	3	1	12	192
TOTAL,	19	20	46	48	44	22	199	3184

CHART NO. 2 (CONTINUED)

Showing same facts for service given in required individual instruction in hygiene. (Term ending June, 1913).

	C	C	B	B	A	A	(1)	(2)	(3)	(4)	Total Week	Total Term
T. A. S.,	2	2	1	1	1	1	1	1	1	1	12	192
L. B. McK.,	2	2	2	1	1	0	0	0	0	0	8	128
L. L. P.,	1	1	1	0	0	0	0	0	0	0	3	48
R. J. O'N.,	3	3	2	1	1	0	0	0	0	0	10	160
F. A. W.,	2	2	2	1	1	0	0	0	0	0	8	128
W. B. B.,	3	3	2	2	2	2	2	2	2	2	22	352
W. W.,	1	1	1	1	1	0	0	0	0	0	5	80
C. H.,	1	1	1	1	1	0	0	0	0	0	5	80
R. J. McC.,	1	1	1	0	0	0	0	0	0	0	3	58
E. C. B.,	2	2	2	2	2	1	2	2	2	2	19	304
W. S. H.,	1	1	1	2	2	2	3	3	2	2	19	304
P. H. R.,	1	1	1	1	1	0	2	1	1	1	10	160
TOTAL,	20	20	17	13	13	6	10	9	8	8	124	1984

CHART NO. 3

STATISTICS COVERING ENROLLMENT, ATTENDANCE, ABSENCES AND EXAMINATIONS. DEPARTMENT OF HYGIENE.

For the Term Ending June, 1913.

	COURSES.						
	Four	Three	Two	One	A-Two	A-One	Total
Number of students enrolled,	95	91	196	210	221	254	1067
One day late,	2	1	1	6	7	2	19
Two days late,	0	0	0	9	12	15	36
Three or more days late,	0	0	0	6	2	5	13
Number disc. until later term,	0	0	2	15	0	0	17
Number dropped by the Executive Council for excess absences,	8	7	8	24	20	23	90
Number deficient on final exam.,	0	1	0	1	7	26	35
Number receiving credit for passing the re-examination,	0	1	1	2	7	23	34
Number failed in the term's work exclusive of the dropped,	0	5	4	23	18	33	85
Total number receiving credit for completing term's work,	87	79	183	149	183	195	876
Number failed in swimming,	0	3	3	7	0	0	12
Number deficient in swimming marked Inc.,	1	0	1	4	0	0	6
Total number of absences of students completing work,	248	207	464	424	210	241	1794
Total number of absences of students dropped,	53	34	73	71	60	91	382
Number debarred for unclean towel or uniform,	37	25	61	77	48	58	306
Number of monthly written exams. corrected and recorded,	380	364	784	840	884	1016	4268
Number of monthly practical examinations given and recorded,	380	364	784	840	663	762	3793
Number of swimming examinations given and recorded,	285	273	588	630	442	508	2726
Total required attendance in the Exercising Hall,	2940	2912	6272	6720	2936	4064	25844
Total required attendance in the Swimming Pool,	1470	1456	3136	3360	0	0	9422
Voluntary attendance—Exercising Hall,							6989
Voluntary attendance—Hand Ball Courts,							5012
Voluntary attendance—Swimming Pool,							21655
Total Attendance,							68922

CHART NO. 7

REQUIRED INDIVIDUAL INSTRUCTION.

SHOWING

CO-OPERATION OF PARENTS AND PARENTAL EXPENDITURES

ALSO

Showing number of family advisers (physicians, dentists, etc.) having one case; number having two cases, and so on. For the term ending June, 1913.

Family Adviser	Having 1 Case	Having 2 Cases	Having 3 Cases	Having 4 Cases	Having 5 Cases	Having 6 Cases	Having 7 Cases	Having 9 Cases	Having 38 Cases	Number of Advisers
Physician,	302	26	0	0	0	0	0	0	0	328
Dentist,	399	86	23	2	1	1	1	0	0	513
Optician,	31	1	1	0	0	0	0	0	0	33
Hospital,	12	6	5	2	1	0	0	1	0	27
Dental clinic,	0	0	1	0	0	0	0	0	1	2
							Total			903

Showing the number of students who paid for the services of their family advisers and the number of students who secured free service.

	Service of M. D.	Service of D. D. S.	Service of Optician	Service of Hospital	Service of Dental clinic	Total
Number of students who paid for services rendered,	354	666	36	46	38	1140
Number of students who secured free service,	0	0	0	15	3	18

Total number of students treated,		1158
" " " "	who paid for services rendered,	1140
" " " "	who secured free service,	18

CHART NO. 8

REQUIRED INDIVIDUAL INSTRUCTION

NUMERICAL SUMMARY COVERING SEVERAL YEARS

Showing number of medical examinations, consultations and conferences made each term Since 1906–07.

	1st–2d 06–07		1st–2d 07–08		1st–2d 08–09		1st–2d Since 1906–07 09–10		1st–2d 10–11		1st–2d 11–12		1st–2d 12–13		Totals
No. students examined,	45	252	143	72	752	839	1306	644	922	536	592	320	1047	2645	10,115
No. exam. for second time,	0	0	1	0	45	128	571	855	535	596	190	325	319	674	4,239
No. exam. for third time,	0	0	0	0	0	13	27	55	568	568	228	226	319	304	2,308
No. exam. for fourth time,	0	0	0	0	0	1	6	34	400	500	243	280	214	270	1,948
No. exam. for fifth time,	0	0	0	0	0	0	3	1	23	133	349	151	261	190	1,111
No. exam. for sixth time,	0	0	0	0	0	0	0	1	2	14	97	179	183	212	688
No. exam. for seventh time,	0	0	0	0	0	0	0	0	1	0	23	270	191	165	650
No. exam. for eighth time,	0	0	0	0	0	0	0	0	0	0	0	0	33	165	198
No. of consultations,	0	19	67	136	123	297	582	534	297	621	577	750	901	741	5,645
No. of conferences,	0	5	9	10	561	126	3494	3410	3128	2576	2552	1977	3919	3773	25,540
No. inspections,	0	0	0	0	1363	1454	1336	2433	1531	2636	977	1887	1082	1062	15,761
No. of athletic examinations,	0	0	0	172	173	0	103	109	200	28	281	73	234	91	1,464
Total number of personal advisory contacts,															69,667

CHART NO. 10

PROTECTION FROM CONTAGION.

(Enforcement of Sec. 145 of Sanitary Code).

Showing number of cases investigated in the reports of the Board of Health; number of exposures found among the students; number of students taken out of their classes, etc., for term ending July 1, 1913.

1.	No. cases investigated from Borough of Manhattan,	13,354
	No. cases investigated from Borough of Brooklyn,	11,284
	No. cases investigated from Borough of the Bronx,	5,288
	No. cases investigated from Borough of Queens,	1,867
	Total number of cases investigated,	31,793
2.	No. students found exposed to contagion at home,	63
3.	No. students in attendance and taken out of classes,	38
4.	No. students exposed to scarlet fever,	12
5.	No. students exposed to diphtheria,	18
6.	No. students exposed to measles,	28
7.	No. students exposed to German measles,	3
8.	No. students exposed to chicken pox,	1
	Total,	163
9.	No. not now in attendance,	13
10.	No. reinstated on certificate from Board of Health,	49
	Total,	62
11.	Night College cases,	3

CHART 13.

Showing cost of the various sorts of staff services in the Academic and Collegiate departments for the term ending July 1, 1913.

	Academic Department	Collegiate Department	Total
Class instruction,	$520.00	$2,287.36	$2,807.36
Individual instruction,	2,088.64	1,000.16	3,088.80
Protection against disease,	252.23	151.20	403.52
Supervision of voluntary work,	287.84	700.96	988.08
Athletics supervision,	220.32	661.12	881.44
Administrative supervision,	150.08	600.00	750.08
Miscellaneous service,	743.33	1,486.67	2,230.00
TOTAL.,	$4,262.53	$6,887.47	$11,150.00

THE NARRAGANSETT MACHINE CO. OF PROVIDENCE, RHODE ISLAND, MAKERS OF GYMNASTIC APPARATUS AND LOCKERS, SUPPLIED THE ILLUSTRATIONS USED IN THIS BOOK.

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